



(12) PATENT ABSTRACT

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(54) OPENING AND RECLOSING THE STRANDS OF CABLES

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(57) Claim

1. An apparatus adapted to open and close the strands of cables comprising a mandrel having holes located therein through which the strands of a cable can pass such that the interstices between the strands are exposed, and means to reclose the strands to reform the cable.

5. A method of opening and closing the strands of a cable comprising feeding each strand of the cable through a hole in a mandrel and retwisting the strands to form the cable after they have passed through said mandrel.

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Complete Specification for the invention entitled:
"APPARATUS AND METHOD FOR OPENING STRANDS OF REINFORCING RODS"

The following statement is a full description of this invention,
including the best method of performing it known to me:-

The present invention relates to a method and apparatus for opening and reclosing the strands of cables so as to allow access to the interstices between the strands.

5 To protect wire cables from corrosion it is necessary that they are covered with a suitable corrosive resistant coating. In the building industry the reinforcing cable used in concrete slabs consists of six strands twisted around a core strand. To prevent oxidation of these cables
10 a coating of liquefied grease is usually sprayed over the outside of the cables. However the liquefied grease does not usually penetrate between the strands of the cable and as such an effective coating is not always produced.

The present invention seeks to ameliorate this problem
15 by providing a mandrel which has holes passing there-through, through which the individual strands of the cable pass. When the cable is forced through the mandrel the strands are separated to allow access to the interstices between the strands such that any desired coating may be
20 applied to the entire surface of the strands while further movement of the strands from the mandrel cause the strands to reclose themselves around the core strand to again form the wire cable.

In one broad form the invention comprises an apparatus
25 adapted to open and close the strands of cables comprising a mandrel having holes located therein through which the strands of a cable can pass such that the interstices

between the strands are exposed, and means to reclose the strands to reform the cable.

5 In another form the invention comprises a method of opening and closing the strands of a cable comprising feeding each strand of the cable through a hole in a mandrel and retwisting the strands to form the cable after they have passed through said mandrel.

The invention will now be described with reference to the accompanying drawings in which:

10 Figure 1 shows a reinforcing rod passing through a mandrel of one embodiment of the present invention and;

Figure 2 shows the reinforcing rod leaving the mandrel.

As shown in the accompanying drawings the individual strands of the cable 4 pass through holes 2 in the mandrel

15 1. Preferably the mandrel 1 is rotatable within its housing 6 such that it can rotate to align with the helical pattern of the strands 3 of the cable 4 as the strands pass through it. The means (not shown) for driving the cable 4 through the mandrel 1 may comprise a plurality of rollers which feel the cable 4 through the mandrel 1 and through a die (not shown) located passed the mandrel 4 which again recloses the wire strands around the central core. Located between the mandrel 1 and the die is a coating station 5 which sprays under high pressure liquefied grease to

20 completely coat each strand 3 of the cable 4 as it passes through said station 5. Instead of the high pressure sprays any appropriate form of coating application could be

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used such as a grease bath for example.

5 The invention therefore provides a device and method whereby the individual strands of cables such as reinforcing cables can be separated to provide access to the interstices between the cables and reclosed to reform the cable.

The claims defining the invention are as follows:

1. An apparatus adapted to open and close the strands of cables comprising a mandrel having holes located therein through which the strands of a cable can pass such that the interstices between the strands are exposed, and means to reclose the strands to reform the cable.
2. An apparatus according to claim 1 wherein said means to reclose the strands comprises a die with a substantially circular opening through which the strands pass and wherein said cable is fed by a plurality of rollers.
3. An apparatus according to any one of the preceding claims wherein said mandrel is rotatable so as to align itself with the helical pattern of the strands.
4. An apparatus according to any one of the preceding claims wherein a coating station is located between the mandrel and the means to restore the strand; to apply a coating to each strand before they are reclosed.
5. A method of opening and closing the strands of a cable comprising feeding each strand of the cable through a hole in a mandrel and retwisting the strands to form the cable after they have passed through said mandrel.
6. An apparatus adapted to open and close the strands of cables substantially as hereinbefore described with reference to the accompanying drawings.

7. A method of opening and closing the strands of a cable substantially as hereinafter described with reference to the accompanying drawings.

DATED this 29th day of October, 1980.

VSL PRESTRESSING (AUST.) PTY. LTD.,

By its Patent Attorneys,

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FIG. 1

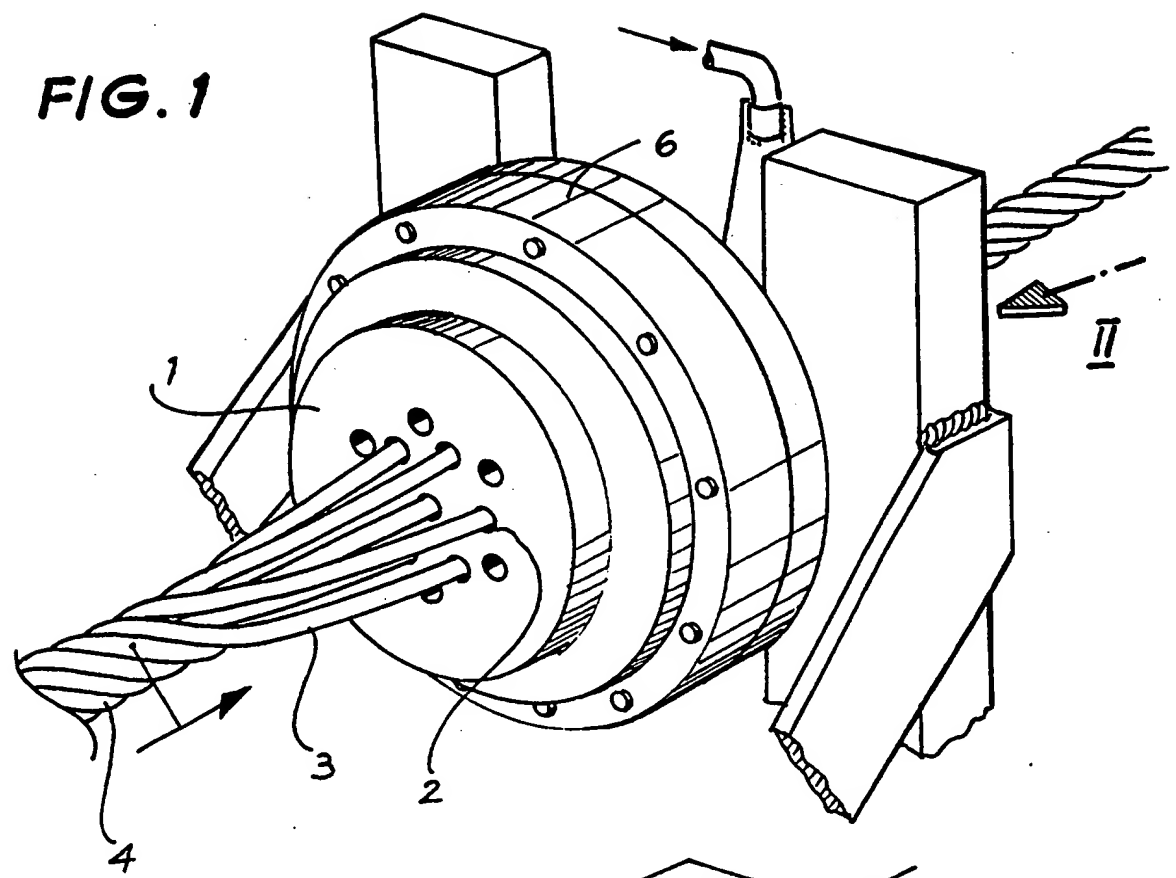


FIG. 2

